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10/632,863	08/04/2003	Yoshifumi Tanimoto	030817	4619
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WESTERMAN, HATTORI, DANIELS & ADRIAN, LLP			BIAGINI, CHRISTOPHER D	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)
	10/632,863	TANIMOTO, YOSHIFUMI
Examiner	Art Unit	
Christopher D. Biagini	2142	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 19 October 2007.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1,4-16 and 19 is/are pending in the application.
 - 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1,4-16 and 19 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

Applicant's arguments regarding the rejection of claims 1-18 under 35 USC §112, second paragraph have been fully considered but are not persuasive. In the response filed 9/19/2007, Applicant simultaneously argued that "the structure corresponding to the means-plus-function language does not have to be explicit" and "the present specification clearly describes the structure corresponding to the 'means for transmitting an electronic mail.'" Applicant elaborates on these arguments in the response filed 10/19/2007.

Regarding the first argument, the Examiner respectfully disagrees with Applicant's characterization of §112(2) and §112(6). Applicant argues that the structure "may be implicit or inherent in the specification" (response filed 9/19/2007, page 8) and that "§112, second paragraph, is satisfied with respect to means-plus-function language if *any* means for transmitting is disclosed" (response filed (10/19/2007, page 2). The Examiner respectfully submits, however, that *no* structure is "implicit or inherent" in the specification. As previously argued, the sheer number of structures which may be reasonably interpreted as a "means for transmitting" makes it impossible to properly construe the metes and bounds of the claim. Beyond the fact that the "means for transmitting" is disclosed as a component of a facsimile machine or personal computer, the specification provides absolutely no direction as to what is meant by this limitation. "If an applicant fails to set forth an adequate disclosure, the applicant has in effect failed to particularly point out and distinctly claim the invention as required by the second paragraph of section 112." *In re Donaldson Co.*, 16 F.3d 1189, 1195, 29 USPQ2d 1845,

1850 (Fed. Cir. 1994) (in banc). By choosing to use "means-plus-function" language as described in 35 USC §112, sixth paragraph, Applicant has invited the burden of ensuring that the specification provides an adequate disclosure showing what is meant by that language.

Regarding the second argument, the Examiner respectfully submits that the present specification *does not* clearly describe the corresponding structure, and notes that Applicant has attempted to point to two very different elements in the specification as teaching the "means for transmitting." In the response filed on 5/30/2007, Applicant pointed to a "transmitter" (see page 8). As previously argued, this section of the specification appears to refer to a *human* transmitter (i.e., one who transmits), and thus cannot be the claimed "means for transmitting." In the responses filed 9/19/2007 and 10/19/2007, Applicant pointed to "mail clients" as corresponding to the limitation. However, this argument appears to be inconsistent with the language of the claims, which indicates that the "electronic mail client" *comprises* a "means for transmitting" along with several other components. Indeed, claim 9 recites that the mail client comprises a *plurality* of "means for transmitting." Logically, a mail client cannot comprise a plurality of other mail clients.

Furthermore, the Examiner notes that the confusion between the "means for transmitting" and "transmitter" has not been resolved. The specification and claims as originally filed make a clear distinction between the two terms. It appears that the "means for transmitting" is intended to refer to some unspecified component of a personal computer or the like, while a "transmitter" is intended to refer to the human operator of the computer. However, in the claims as now amended, all instances of the word "transmitter" have been replaced with the phrase "means for transmitting." If the terms mean the same thing, it is unclear why the distinction was made in the

application as originally filed. If the terms mean different things, there does not appear to be support in the specification for the amendments to claims 1, and 9-12.

The deficiencies described above render claims 1-18 irresolvably ambiguous.

Accordingly, **the rejection under 35 USC §112, second paragraph is maintained**. However, the Examiner will endeavor to apply meaningful art to claims 1-18 in an effort to advance prosecution.

Applicant's arguments with respect to the art rejections of claims 1-19 have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-18 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

As to claims 1 and 17, it is noted that the limitation "means for transmitting" meets the requirements for treatment under 35 U.S.C. 112, sixth paragraph. Accordingly, the limitation is to be construed to encompass the corresponding structures in applicant's specification and equivalents thereof. However, applicant's specification lacks any recitation of a specific structure

which performs the transmitting and storing functions. Therefore, claim 1 fails to particularly point out and distinctly claim the subject matter which applicant regards as the invention. See MPEP §2181.

For the purposes of this examination, the limitation "means for transmitting" will be construed to cover any means which performs a transmitting function.

Any claim not specifically addressed above is rejected for incorporating the deficiencies of a parent claim on which it depends.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 4-10, 13, and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Katsuji (Japanese Publication No. 11-164121) in view of Postel ("RFC 821: Simple Mail Transfer Protocol"), and further in view of Williams et al. (US Patent No. 5,424,724, hereinafter "Williams").

Regarding claim 1, Katsuji shows an apparatus comprising:

- means transmitting an electronic mail via a mail server (LAN I/F 16);

- means for storing information representing a plurality of mail servers and a priority order of the respective mail servers (memory section 17: see [0017]);
- selection means (system control section 11) for selecting a mail server for transmitting an electronic mail in accordance with the priority order stored in the means for storing (see [0017]); and
- determining means (system control section 11) for determining a type of failure that has occurred when the transmission of the electronic mail via the selected mail server fails (comprising determining that SMTP server 20 has stopped for failure or maintenance: see [0017]), and for determining, in accordance with the type of failure determined, whether to select a mail server of next in priority order (comprising determining to select the next mail server upon detecting a failure of the first server: see [0017]-[0022]).

Katsuji does not show a determining means for determining whether to establish a connection again with the mail server that was selected at the time of the failure in the transmission of the electronic mail, or to cancel the transmission.

Katsuji further does not show a bypass permission table which stores data indicating whether or not it is possible for the means for transmitting to bypass the selected mail server and the selection means select the mail server of next in priority order for transmitting the electronic mail, wherien the bypass permission table can be formed and rewritten.

Postel shows a determining means for determining whether to establish a connection again with the mail server that was selected at the time of the failure in the transmission of the electronic mail (comprising the logic which performs the functionality described in the

discussion of "Transient Negative Completion" errors on pp. 48-49), or to cancel the transmission (comprising the logic which performs the functionality described in the discussion of "Permanent Negative Completion" errors on p. 49).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the invention of Katsuji with the determining means taught by Postel in order to accommodate three most likely email failure conditions: (1) the failure of a mail server, as taught by Katsuji; (2) temporary errors which are likely to be resolved prior to a second request, as taught by Postel; and (3) permanent errors which are *not* likely to be resolved prior to a second request, as taught by Postel.

Williams shows a bypass permission table which stores data indicating whether or not it is possible to bypass a mail server and select a mail server of next in priority order for transmitting an electronic mail (comprising a host agent reference table, and specifically the table of host agents 58: see Figs. 2-3 and col. 6, lines 4-32), wherein the bypass permission table can be formed and rewritten (see col. 5, lines 34-40). Note that the table indicates whether it is possible to bypass a server and select the server of next in order (i.e., if the current host agent is not the last host agent, it is possible to bypass the server: see decision block 90 in Fig. 3).

It would have been obvious to one of ordinary skill in the art at the time of the invention to further modify the system of Katsuji with the bypass permission table of Williams in order to efficiently utilize the available servers on the network (see Williams, col. 1, lines 62-68).

Regarding claim 4, the combination of Katsuji, Postel, and Williams shows the limitations of claim 1 as applied above, and Katsuji further shows wherein the determining

means determines that the type of failure is a failure in a connection with the selected mail server, a mail server of the next in priority order is selected (see [0020]).

Regarding claim 5, the combination of Katsuji, Postel, and Williams shows the limitations of claim 4 as applied above, but does not show wherein when the determining means determines the failure in the connection with the selected mail server, the mail server of the next in order is selected immediately without waiting for an elapse of waiting time.

However, the Examiner takes Official Notice that it is notoriously old and well-known in the art to fail over immediately to a redundant resource without waiting for an elapse of waiting time. It would have been obvious to one of ordinary skill in the art to modify the invention of Katsuji by selecting the next server immediately in order to prevent excessive delays caused by multiple inaccessible servers.

Regarding claim 6, the combination of Katsuji, Postel, and Williams shows the limitations of claim 1 as applied above, but does not show wherein when a connection with the selected mail server is established the determining means determines that the type of failure is temporary error generated during a communication, the connection is established again with the mail server that was selected at the time of the failure in the transmission of the electronic mail.

Postal shows wherein a communication with a mail server is established and a temporary error is generated, the connection is established again with a mail server that was selected at the time of the failure in the transmission of the electronic mail (see discussion of "Transient Negative Completion" errors on pp. 48-49). It would have been obvious to one of ordinary skill

in the art at the time of the invention to further modify the combination of Katsuji, Postel, and Williams in order to accommodate situations where the problem causing the error is likely to have been resolved between requests.

Regarding claim 7, the combination of Katsuji, Postel, and Williams shows the limitations of claim 1 as applied above, but does not show wherein when the determining means determines that the type of failure is a failure in the transmission of the electronic mail due to incorrect destination, the transmission is cancelled.

Postal shows wherein when failing in the transmission of an electronic mail is due to incorrect destination, the transmission is cancelled. See discussion of "Permanent Negative Completion" errors on p. 49 and note that error code 550, which indicates that the destination mailbox is unavailable as described on p. 35, is a permanent error. It would have been obvious to one of ordinary skill in the art at the time of the invention to further modify the combination of Katsuji, Postel, and Williams in order to accommodate situations where the problem causing the error is not likely to have been resolved between requests.

Regarding claim 8, the combination of Katsuji, Postel, and Williams shows the limitations of claim 7 as applied above, and further shows wherein the determining means determines the failure in transmission of the electronic mail due to the incorrect destination, the transmission is cancelled (see above), but does not show that a message indicating such a fact is output.

Postal shows wherein a message indicating such a fact is output (comprising returning a 550 Failure reply: see the last paragraph of p. 4). It would have been obvious to one of ordinary skill in the art at the time of the invention to further modify the combination of Katsuji, Postel, and Williams with the message output of Postel in order to alert users that a permanent error has occurred.

Regarding claim 9, the combination of Katsuji, Postel, and Williams shows the limitations of claim 1 as applied above, and further shows:

- a plurality of means for transmitting (multiple users or multiple personal computers: see Williams, col. 3, lines 1-2 and 18-23),
- a plurality of destinations of the electronic mail (comprising destination nodes shown in Fig. 2 of Williams), and
- means for storing whether or not to select a mail server of next in priority order for each means for transmitting or for each destination of the electronic mail (items 56 and 58 in Fig. 2 of Williams, as described above).

Regarding claim 10, the combination of Katsuji, Postel, and Williams shows the limitations of claim 9 as applied above, and further shows that the bypass permission table stores data indicating whether or not it is possible to bypass a selected mail server and select a mail server of next in priority order for each destination of the electronic mail (note that for listed destination nodes, the table stores that it is not possible to bypass, and for the default destination

node, the table stores that it *is* possible to bypass). See Williams, Fig. 3, and col. 5, line 41 to col. 6, line 33.

Regarding claim 13, the combination of Katsuji, Postel, and Williams shows the limitations of claim 1 as applied above, and further shows a mail server list which stores the plurality of mail servers and the priority order of the plurality of mail servers (see [0017]), but does not show wherein the mail server list is rewritable.

However, the Examiner takes Official Notice that it is notoriously old and well-known in the art to make a data structure rewritable. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the invention of Katsuji by making the mail server list rewritable in order to allow a user to alter it in the future.

Claim 19 contains limitations similar to those of claim 1 and is rejected for the same reasons as applied above.

Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Katsuji (Japanese Publication No. 11-164121) in view of Postel (“RFC 821: Simple Mail Transfer Protocol”), and further in view of Williams (US Patent No. 5,424,724) and Glasser et al. (US Pat. No. 5,956,715, hereinafter “Glasser”).

The combination of Katsuji, Postel, and Williams shows the limitations of claim 1 as applied above, but does not show wherein there is a limit on whether or not to select a mail server of next in priority order according to a level of authority of a means for transmitting.

Glasser shows limiting access to network resources according to a level of authority of a user (see col. 1, lines 54-58). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the invention of Katsuji with the authority system of Glasser in order to prevent a user from having unlimited access to all server resources (see Glasser, col. 1, lines 45-47).

Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Katsuji (Japanese Publication No. 11-164121) in view of Postel (“RFC 821: Simple Mail Transfer Protocol”), and further in view of Williams (US Patent No. 5,424,724) and Shimano (US Pat. No. 4,835,730).

The combination of Katsuji, Postel, and Williams shows the limitations of claim 1 as applied above, but does not show wherein a transmitter can determine whether or not to select the mail server of next in order for each transmission of an electronic mail.

Shimano shows a user determining whether to skip a current operation and move onto another (see col. 53, lines 34-42). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the invention of Katsuji in view of Postel with the error recovery decision making of Shimano in order to allow a human user to influence the behavior of the system.

Claims 14-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Katsuji (Japanese Publication No. 11-164121) in view of Postel (“RFC 821: Simple Mail Transfer Protocol”), and further in view of Williams (US Patent No. 5,424,724) and Witek (US Pat. No. 5,461,488).

Regarding claim 14, the combination of Katsuji, Postel, and Williams shows the limitations of claim 1 as applied above, but does not show a means for forming a transmission log; wherein "transmission date and time," "destination," "mail server that was used," and "transmission result" are written in the transmission log.

Witek shows a means for forming a transmission log (control code 22) which logs a variety of information (see col. 4, lines 32-56). It would have been obvious to modify the combination of Katsuji, Postel, and Williams with the logging taught by Witek in order to store event information for subsequent reference and future use (see Witek, col. 4, lines 35-36).

Regarding claim 15, the combination of Katsuji, Postel, and Williams in view of Witek shows the limitations of claim 14 as applied above, but does not show wherein the transmission log is formed for each Transmission Control Protocol (TCP) connection.

Witek shows logging a variety of information (see col. 4, lines 32-56). It would have been obvious to modify the invention of Katsuji with the logging taught by Witek in order to store event information for subsequent reference and future use (see Witek, col. 4, lines 35-36).

Regarding claim 16, the combination of Katsuji, Postel, and Williams in view of Witek shows the limitations of claim 14 as applied above, but does not show wherein the transmission log is formed for each Simple Mail Transfer Protocol (SMTP) connection.

Witek shows logging a variety of information (see col. 4, lines 32-56). It would have been obvious to modify the invention of Katsuji with the logging taught by Witek in order to store event information for subsequent reference and future use (see Witek, col. 4, lines 35-36).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher D. Biagini whose telephone number is (571) 272-9743. The examiner can normally be reached on weekdays from 8:30 AM to 5:00 PM..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Caldwell can be reached on (571) 272-3868. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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